Cancer Incidence in Fairfield County

County-State Incidence Rate Comparisons (diagnosis years 2004-2008)[*]

- The five most commonly diagnosed cancers in Fairfield County residents were prostate cancer, female breast cancer, lung cancer, colorectal cancer and bladder cancer. These cancers accounted for almost 60% of the cancers diagnosed in the county in 2004-2008.
- The incidence rates of **all invasive cancers**[§] in male and female residents of Fairfield County were **not statistically significantly different**[¶] to the corresponding rates in residents of Connecticut State as a whole.
- The incidence rate of **invasive breast cancer** in female residents of Fairfield County was **not statistically significantly different** to the state rate**.**
  - Factors which increase the risk of developing female breast cancer include age, being of white race, hormonal and reproductive factors (taking hormone replacement therapy, having few or no children, having children later in life, early menarche), lack of physical activity, being overweight/obese, use of alcohol and personal or family history of breast cancer. Access to mammographic screening may also lead an observed increase in breast cancer incidence; however, mammographic screening often detects cancers at an early stage where they are more treatable.
- The incidence rate of **prostate cancer** in male residents of Fairfield County was **statistically significantly higher** than the state rate. [Fairfield County: 182.5 per 100,000 (95% CI 176.7-188.4); Connecticut: 162.1 per 100,000 (95% CI 159.3-164.8)].
  - Risk factors for prostate cancer include age, being of African American race and family history. Access to prostate-specific antigen (PSA) testing may also lead an observed increase in prostate cancer incidence. PSA testing often detects cancers at an early stage where they may be more treatable. However, routine PSA testing to screen for prostate cancer is not recommended for the general male population; certain men at high risk for prostate cancer may benefit from prostate cancer screening.
- The incidence rate of **lung cancer** in **female** residents of Fairfield County was **not statistically significantly different** to the state rate. In **male** residents of Fairfield County, the incidence rate of **lung** cancer was **statistically significantly lower** than the state rate. [Fairfield County: 67.5 per 100,000 (95% CI 63.9-71.2); Connecticut: 80.2 per 100,000 (95% CI 78.2-82.1)].
  - The most important risk factor for lung cancer is tobacco smoke. Other risk factors include age, radon, asbestos, family history and personal history of lung cancer. There is currently no recommended screening test for lung cancer.
- The incidence rates of **colorectal cancer** in male and female residents of Fairfield County were **not statistically significantly different** to the state rates.
  - Risk factors for colorectal cancer include age, family or personal history of colorectal cancer and colorectal polyps. Screening for colorectal cancer may detect polyps before colorectal cancer develops or may detect colorectal cancer at an early stage when it is more treatable.
- The incidence rates of **bladder cancer** in male and female residents of Fairfield County were **not statistically significantly different** to the state rates.

---

[*] Rate estimates are for 5 years aggregated (2004-2008) in order to obtain reliable estimates based on sufficiently high numbers of cancer cases. Problems arise in interpreting differences in rates based on small numbers of cases because of difficulties distinguishing random fluctuation (i.e., due to chance) from true changes in underlying rates.
[§] The term 'all invasive cancers' excludes basal and squamous cell skin cancers (i.e., non-melanoma skin cancers) but includes *in situ* bladder tumors due to difficulties in distinguishing these tumors from invasive bladder tumors.
[¶] Statistical significance gives an indication of the reliability of a rate estimate. Statistical significance is usually reported at the 95% confidence limit as is the case here; if an estimate is statistically significantly different, we are 95% confident there is a true difference and it is not due solely to chance.

o   The most important risk factor for bladder cancer is tobacco smoke. Other risk factors include certain chemicals (workplace exposures), personal history of bladder cancer and certain cancer treatments. There is currently no recommended screening test for bladder cancer.

County-State-Nation Incidence Rate Comparisons (diagnosis years 2003-2007)

- Connecticut males had the 10th highest rate of all invasive cancers in the US[#].
- Connecticut females had the 5th highest rate of all invasive cancers in the US.

Invasive Cancer Incidence Rates in Fairfield County, Connecticut and the United States									
All Sites Male, 2003-2007					All Sites Female, 2003-2007				
State	Cases	Age-adjusted Rate	95% Confidence Interval[φ]		State	Cases	Age-adjusted Rate	95% Confidence Interval	
			Lower Limit	Upper Limit				Lower Limit	Upper Limit
Fairfield County	12,601	600.7	590.1	611.4	Fairfield County	12,520	467.1	458.9	475.5
Connecticut	49,091	589.3	584.0	594.6	Connecticut	48,492	456.3	452.1	460.4
U.S.	3,461,521	552.5	551.9	553.1	U.S.	3,213,675	414.7	414.3	415.2
Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.									

- The incidence rate of all invasive cancers in the US is **statistically significantly lower** than the rates in both Fairfield County and the state of Connecticut; the rates in Fairfield County and Connecticut are **not statistically significantly different**.
- Cancer incidence rates in the Northeast US are higher than the rates for the US as a whole for several of the most common cancers:
    o   The incidence rates of all invasive cancers are higher than US rates in all nine Northeast US states (CT, ME, MA, NH, NJ, NY, PA, RI, VT).
    o   The incidence rates of female breast cancer are higher than US rates in all nine Northeast US states (CT, ME, MA, NH, NJ, NY, PA, RI, VT); utilization of mammographic screening is also highest in the Northeast US[Υ].
    o   The incidence rates of prostate cancer are higher than US rates in eight of the nine Northeast US states (CT, ME, MA, NH, NJ, NY, PA, RI); utilization of PSA testing for prostate cancer is higher than for the US as a whole in six of the nine the Northeast US states (CT, ME, MA, NH, NY, RI)[π].

[#] National cancer incidence data only include states with a cancer registration system meeting data quality standards. In 2007, 49 states met the data quality standards.

[φ] The 95% confidence interval is bounded by the lower and upper limits. If the confidence intervals around two rate estimates *do not* overlap, the rates are considered to be *significantly different*.

[Υ] http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5926a4.htm?s_cid=mm5926a4_w

[π] BRFSS, 2008 (http://www.cdc.gov/brfss/index.htm)